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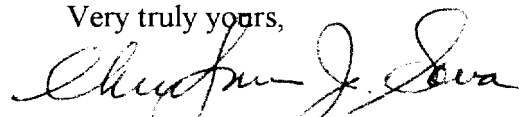
Re: **MM Docket No. 99-325**

Dear Ms. Salas:

On behalf of Infinity Broadcasting Corporation, I am transmitting herewith an original and 4 copies of its Comments in the above-referenced proceeding. In addition, by copy of this letter, I am submitting the Comments on a 3.5 inch formatted, read only diskette to William J. Scher (FCC) and to the Commission's copy contractor, International Transcription Services.

Should there be any questions concerning this matter, please contact the undersigned.

Very truly yours,


Christopher J. Sovia

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Dated: January 24, 2000

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SUMMARY

Infinity Broadcasting Corporation (“*Infinity*”) hereby submits these comments in the above-captioned Notice of Proposed Rulemaking, MM Docket No. 99-325 (the “*NPRM*”).

Infinity believes that an in-band, on-channel (“*IBOC*”) digital audio broadcasting (“*DAB*”) approach is the only viable DAB system that will enable the industry to successfully and expeditiously implement DAB, and urges that the Commission, prior to the end of this year, select a single IBOC system as the industry standard for DAB.

Analog broadcast radio faces significant competitive challenges from the high fidelity offered by media that utilize digital technology; therefore, terrestrial broadcasters must be provided the opportunity to offer at least an equivalent digital service to the public. The IBOC system developed by USA Digital Radio, Inc. (“*USADR*”) will provide a vastly improved service to the public, offering enhanced sound fidelity, improved robustness, and providing broadcasters the ability to offer enhanced auxiliary services that are significantly more robust and of a higher quality than today’s subcarrier services.

IBOC technology should receive priority as the DAB standard because it will allow both AM and FM stations to implement DAB, with minimal interference to existing analog AM and FM stations during the transition period, and without requiring a burdensome investment by existing analog broadcasters. Further, IBOC is compatible with the continued operation of existing analog broadcast stations, and produces minimal audible degradation to the adjacent analog signal. This will allow for a transition period that should result in minimal disruption to station listeners. This gradual transition to all-digital would also allow consumers to continue to use analog receivers for several years, gradually upgrading to digital as part of the

normal cycle of equipment replacement. Such a phased-in transition to IBOC will allow broadcasters to upgrade to digital based upon local listener demand, rather than by requiring a forced, immediate conversion to all-digital technology.

Radio listeners will expect to receive a station's digital signal throughout the same area that the existing analog signal is received, which, in many instances, extends beyond a station's protected contour. Therefore, in order for the public to accept DAB, it is important that broadcasters be allowed to match their DAB coverage to existing analog listening patterns.

IBOC is superior to a new-spectrum DAB system because there is no available bandwidth to devote to DAB. Although the Commission discusses the possibility of utilizing the spectrum currently allocated to television channel 6, such spectrum will not be available until after the DTV transition has been completed. Such a lengthy delay in implementing DAB would be harmful to both the public, which would be deprived of the great benefits of DAB, and broadcasters, who would be forced to compete using their current analog signals against other media that will be providing superior digital service.

It is in the public interest for the Commission to adopt a single DAB standard in the most expeditious manner possible. USADR has shown significant progress in its development of a viable IBOC system, and recently released its Report on Laboratory and Field Testing Presented to the National Radio Systems Committee. This report offers compelling evidence that the USADR IBOC system offers superior audio quality over today's analog service, without harming existing analog broadcasting, while at the same time, offering a level of flexibility equivalent to analog broadcasting in allowing broadcasters to address listener expectations and demands for ancillary subcarrier services.

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of)	
)	
NOTICE OF PROPOSED RULEMAKING)	MM Docket No. 99-325
)	
Digital Audio Broadcasting Systems)	
And Their Impact On the Terrestrial Radio)	
Broadcast Service)	
)	
)	
To: The Commission)	

COMMENTS OF INFINITY BROADCASTING CORPORATION

I. INTRODUCTION

Infinity Broadcasting Corporation (“*Infinity*”) hereby submits these comments in the above-captioned Notice of Proposed Rulemaking, MM Docket No. 99-325 (the “*NPRM*”).

Infinity believes, based on current research and tests performed by proponents of the various alternative digital audio broadcasting (“*DAB*”) systems and the National Association of Broadcasters (“*NAB*”), as well as the overwhelming support exhibited by broadcasters and receiver manufacturers, that an in-band, on-channel (“*IBOC*”) DAB approach is the only viable DAB system that will enable the industry to successfully and expeditiously implement DAB. The Federal Communications Commission (“*FCC*” or the “*Commission*”) itself favors the development of DAB, having previously stated that it supports

“the efforts of industry committees studying technical standards that would allow terrestrial radio broadcasters to convert to digital transmissions. When it appears that a viable system has been designed, we will act expeditiously to consider changes to our rules to allow AM and FM licensees to offer digital sound.”¹

The IBOC system developed by USA Digital Radio, Inc. (“USADR”) is a viable DAB system²; Infinity therefore urges that the Commission act prior to the end of this year to select a single IBOC system as the industry standard for DAB.

Infinity is one of the largest radio broadcasting companies in the United States, employing approximately 5,900 persons full-time and an additional 2,000 persons part-time, and operating 116 FM and 46 AM stations in 35 markets. Infinity's 162 radio stations serve diverse segments of the population and offer a wide variety of programming formats. Infinity takes its role seriously as a trustee of the public airwaves. Its parent, CBS Corporation (“CBS”) has, virtually since the advent of broadcasting, been a pioneer in elevating the quality and accessibility of broadcast services to the next plateau, and is one of the original founders of USADR. Infinity is extremely eager to offer the higher quality service that IBOC DAB will provide to the listening public, and therefore the FCC’s determinations in the instant proceeding will have a direct and significant impact upon Infinity.

¹*Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking* in GEN Docket No. 90-357, 7 FCC Rcd 7776 at para. 34 (1997).

²*Petition for Rulemaking of USA Digital Radio Partners, L.P., In the Matter of Amendment of Part 73 of the Commission’s Rules to Permit the Introduction of Digital Audio Broadcasting in the AM and FM Broadcast Service*, RM-9395 at 23 (filed October 7, 1998) (“Petition”).

Terrestrial broadcasting is unquestionably a vital and critical public resource that touches the lives of virtually every person within the United States. In its NPRM, the Commission recognizes “the importance of our free, over-the-air radio broadcast service, with its unrivaled accessibility and unique ability to provide local news, information and public service programming.”³ Since terrestrial radio coverage is limited to a somewhat modest geographical area, terrestrial radio is unrivaled among all media for the especially strong ties that each individual station maintains with the local communities that it serves; therefore, terrestrial radio stations uniquely reflect the local tastes, values, and interests of these local communities. The interwoven ties of terrestrial broadcast stations and the local communities that they serve is clearly evidenced in the radio programming that is offered in every local community – programming that is tailored to, and that caters and responds to the unique local needs and interests of these individual communities. Local broadcasters are relied upon to provide a broad range of programming – from entertainment programming that includes sports, talk, and music, to comprehensive emergency weather coverage, public affairs programming and public service announcements; from the dissemination of Emergency Alert System broadcasts, to the provision of important news and the discussion of differing viewpoints regarding the important issues in political campaigns. Local broadcasters provide substantial resources through financial assistance, programming and promotional support and free advertising time to numerous worthwhile charities and educational organizations. There is no question, therefore, about the

³*In the Matter of Digital Audio Broadcasting systems and Their Impact On the Terrestrial Radio Broadcast Service, Notice of Proposed Rule Making* in MM Docket No. 99-325, FCC 99-327 at para. 4 (1999) (“NPRM”).

importance of the active and direct role that broadcasters provide to the local communities that they serve.⁴ Such is the unique role of terrestrial radio, and the reason why preserving and revitalizing terrestrial radio is demonstrably in the public interest.

Analog radio has proven to be remarkably durable and adaptable over the years; however, it remains inherently limited technologically as to quality and sound fidelity. As the Commission noted in its NPRM, the intrinsic limitations of analog radio broadcast technology do not allow for further material improvements in quality, and broadcast radio thus faces significant competitive challenges. Current analog radio technology, without the implementation of DAB technology, cannot adapt further to keep pace with the high fidelity that the public has become accustomed to through the advent of the “digital age”: compact discs (“CD”), digital audio tape, and digital MP3 technology have been introduced commercially to overwhelming success and public acceptance. Infinity’s stations must compete for audience and advertising revenue not only with other radio stations, but also with broadcast television, cable television, the Internet, newspapers and billboards. Already, several of these media have been given the “green light” to proceed with the implementation of digital technology. Further, the Commission recognized the technical superiority inherent in digital technology when it recently authorized two entities to provide subscription satellite digital audio radio services (“DARS”).⁵

⁴See Comments of CBS Corporation at 5-6 filed in *Petition for Rulemaking*. All comments and reply comments cited herein, unless otherwise specified, were filed in response to *In the Matter of Amendment of Part 73 of the Commission’s Rules to Permit the Introduction of Digital Audio Broadcasting in the AM and FM Broadcast Services*, RM-9395 (1998).

⁵NPRM at para. 4.

In light of the highly competitive nature of broadcasting, existing terrestrial broadcasters must be provided the opportunity to offer at least an equivalent digital service to the public. In comments filed previously regarding DAB, Heftel Broadcasting Corporation (“*Heftel*”), the largest operator of Spanish-language radio broadcast stations in the United States, correctly observed that DAB “will help maintain the competitiveness of broadcasters in a market that includes DARS, cable and satellite delivery of digital audio, and Internet audio,” and that “[b]y allowing radio broadcasters to compete in the digital arena, Heftel will be able to continue to provide the local community service its listeners have come to expect.”⁶ Radio One, Inc. (“*Radio One*”), the largest minority-owned broadcasting company in the United States, stated that “[t]he Commission has long defined the public interest largely by service to the local community. The Commission must now reaffirm that commitment by giving AM and FM broadcasters the technology they will need to survive and prosper in the future. The Commission can take a significant step in this direction by authorizing the [DAB] service proposed in the Petition [of USADR that requested a rulemaking to provide for DAB service].”⁷ The NAB has stated that “[i]n order to compete effectively and to maximize service to the public, free, over-the-air radio broadcasting must be given IBOC DAB opportunities.”⁸

For these reasons, the Commission must act expeditiously to allow terrestrial broadcasters to implement DAB so that they can compete on a level playing field with respect to signal quality with alternative providers of digital audio programming.

⁶ Comments of Heftel at 2.

⁷Comments of Radio One at 3.

⁸Comments of NAB at 10.

Current testing indicates that IBOC DAB technology can enhance the sound quality and fidelity of both the FM and AM bands⁹, and that DAB provides the technology to allow terrestrial broadcasting to remain competitive with the new digital technologies that have quickly become industry standards. Terrestrial radio broadcasting is prevalent in American society because it is relatively inexpensive to access by all Americans – portable AM/FM receivers have for many years been available to the public for modest sums, and nearly every motor vehicle on American highways today has a car radio. It seems irrational that this most-accessible type of media has not had the opportunity to offer a digital service which, the industry generally agrees, is available for implementation today. Infinity therefore respectfully requests that the Commission act as expeditiously as possible to select an IBOC DAB standard this year so that terrestrial broadcasters can begin to implement DAB as soon as possible after that.

II. DAB POLICY GOALS

Infinity for the most part agrees with the Commission's stated public policy objectives for DAB, and is firmly convinced that IBOC DAB is the best approach for fulfilling these objectives because it can most readily be implemented. The fundamental underlying consideration behind the implementation of DAB must be the simple goal of providing a vastly improved radio service to the public¹⁰ — one that will strengthen, not weaken, the vitality of the existing free, over-the-air broadcast service which, as the Commission has recognized, "provides service to virtually all Americans through a strong, independent system of privately owned and

⁹NPRM at para. 7.

¹⁰NPRM at para. 15.

operated stations.”¹¹ As the research and engineering tests indicate, IBOC DAB will provide a vastly improved service to the public. IBOC DAB provides enhanced sound fidelity, improved robustness, and new radio features, and offers broadcasters the ability to provide enhanced auxiliary services that are significantly more robust and of a higher quality than today’s subcarrier services.¹² The sound quality of an IBOC DAB system is close to that of the original source material, and importantly, IBOC DAB allows for the upgrade of both AM and FM analog signals. An FM signal on an IBOC DAB system will, for example, produce sound quality comparable to that of a CD, while an AM signal on an IBOC DAB system will produce sound quality comparable to that of current analog FM signals.¹³ In addition, IBOC DAB will provide improved robustness of the radio signal, increasing the signal’s ability to withstand interference from other radio transmissions, from multipath fading, and from noise.

Infinity agrees with the Commission that the DAB standard selected must support “a vibrant and vital terrestrial radio service for the public”, and that the opportunity to offer DAB service must be made readily available to all existing radio broadcasters.¹⁴ The Commission has previously determined in the context of the digital television proceeding that existing broadcasters are best suited to introduce DAB service to the public.¹⁵ Towards this end, Infinity urges that the Commission select a single IBOC system as the standard for DAB, because IBOC technology uniquely provides a platform from which both AM and FM stations can implement

¹¹*Id.* at para. 16.

¹²Petition at 15.

¹³*Id.* at 14-15.

¹⁴NPRM at para. 16.

¹⁵*Id.*

DAB, with minimal interference to existing analog AM and FM stations during the transition period, and without requiring a burdensome investment by existing analog broadcasters.

USADR's IBOC system is unique in that it adds low-level digital sidebands to each side of the analog signal that provide the primary digital service. By restricting the digital carrier to the sidebands, USADR's IBOC system minimizes the interference to the host analog and adjacent channels.¹⁶ USADR's IBOC technology provides for a gradual transition from all-analog service to all-digital service, and during the post-all analog, pre-all digital "hybrid IBOC/analog" stage, analog and digital stations can co-exist in allotted bandwidth with minimal interference.¹⁷

In field tests, USADR measured the impact of digital sidebands on first adjacent analog signals, and concluded that there was no audible degradation to the analog signal.¹⁸ USADR has therefore convincingly demonstrated that its IBOC DAB system will operate compatibly with existing analog signals during a transition phase from all-analog to all-digital with minimal interference to existing analog signals; therefore, broadcasters should be able to implement the "hybrid" phase of the transition to DAB with a minimal and easily-manageable amount of disruption and dislocation to the public.

Infinity supports the Commission's position that an eventual transition to an all-digital environment is an efficient utilization of the spectrum, and is therefore desirable. Importantly, USADR's IBOC system allows for the introduction of DAB without the need for

¹⁶Petition at 47.

¹⁷*Id.* at 50.

¹⁸*USA Digital Radio, Inc., Report on Laboratory and Field Testing Presented to the National Radio Systems Committee* at 11-12 (December 15, 1999) ("NRSC Report").

any allocation of additional spectrum, and therefore represents a dramatically efficient use of the current existing spectrum. Conversion of the existing analog spectrum to DAB will provide existing broadcasters the opportunity to offer additional and enhanced auxiliary services within presently-allotted spectrum space in addition to increasing the clarity and quality of the main audio signal.

The development and testing of IBOC DAB technology has been on-going for almost ten years under the parameters and conditions of the current AM and FM operating environment and under the assumption that the current frequency allocations and uses remain predictable. The NAB has previously stated:

...we have cautioned the FCC concerning any rule or policy changes that might result in increased, ambient interference in the radio broadcast bands...[i]t is our strongly-held view that the introduction of digital capability for the free, over-the-air radio service is of such paramount importance that it should not be threatened by any proposals – current or future – to degrade the already congested interference climate in the radio broadcast bands. For the FCC to do otherwise would be a serious communications policy error. Moreover, this error likely could not be corrected in the future¹⁹

Infinity agrees with the NAB that the Commission should not consider other proceedings or the implementation of changes in the current broadcast environment at this time that could have an unforeseen negative impact on the expeditious and effective implementation of DAB; however, in light of the FCC's decision on January 20, 2000 to introduce a non-commercial low power FM ("*LPFM*") radio service this year, it is more imperative than ever that the Commission act to allow for the swift selection and implementation of a DAB system. It still

¹⁹Comments of NAB at 11-12.

remains to be seen what impact an LPFM service will have on a fully-implemented and operational DAB system. As the Commission stated during the LPFM proceeding, “[w]e are concerned that our understanding of future IBOC systems is preliminary and that we may not be fully aware of any negative impact or restrictions that authorization of low power radio service would have on the transition to a digital IBOC technology for FM stations.”²⁰ With the introduction of LPFM service now imminent, it is crucial for the Commission to definitively analyze and understand the impact of LPFM upon DAB. To do so, the Commission must expeditiously resolve the issues raised in the NPRM and adopt rules to implement a DAB system.

Although Infinity does agree with the Commission that the transition to an all-digital service is in the public interest,²¹ it does not adhere to the belief that the implementation of an all-digital service would liberate spectrum currently being used for other purposes for the introduction of any new class of broadcast services. At this early stage in the implementation of DAB systems, the primary consideration must be that the DAB service offered to the public is of a superior quality, and that it provides a markedly improved service when compared to the existing analog service, such that the public readily accepts and benefits from the new technology as it has other digital technologies. Infinity firmly believes that the primary consideration in selecting the appropriate DAB standard should not be whether such standard is the one that employs the least amount of spectrum possible.

²⁰*In the Matter of the Creation of a Low Power Radio Service, Notice of Proposed Rulemaking*, MM Docket No. 99-25 at para. 1-2 (1999).

²¹NPRM at para. 17.

III. DAB SELECTION CRITERIA

Infinity agrees generally with the Commission's position that enhanced fidelity/robustness, compatibility, spectrum efficiency, flexibility/ancillary capacity, extensibility, accommodation, and coverage considerations are appropriately articulated criteria for evaluating competing DAB systems.²²

Fidelity/Robustness. Because the public generally has come to expect and demand improved audio fidelity, it is critical that the selected DAB system offer significant improvements in sound quality as compared to existing analog broadcasting. USADR has convincingly shown that its IBOC system will enable the public to enjoy sound quality on FM radio that is comparable to that of compact discs, which are now the standard dictated by the marketplace, and that the public will enjoy a sound quality on AM radio that is comparable to existing FM radio transmissions. In addition to sound quality, IBOC DAB will enhance signal robustness, which will reduce impairment to radio signals such as multipathing and noise, increase the signal's resistance to natural and man-made obstructions, and improve signal reception at the outer perimeters of a station's coverage area.²³

Compatibility. The DAB system selected as the standard must be compatible with the continued operation of existing broadcast stations. During the transition period from all-analog broadcasting to all-digital broadcasting, it will be impossible to prevent all interference to existing analog signals; however, the DAB system selected as the standard should minimize any interference to the maximum extent possible. As noted earlier, the technology utilized in

²²NPRM at 10.

²³Petition at 14-15.

USADR's IBOC system has been shown to have minimal audible degradation to the adjacent analog signal.

Spectrum Efficiency. Infinity agrees with the Commission that the DAB standard should promote efficient use of the spectrum²⁴. As the demand for spectrum has increased appreciably in recent years due to the advent of and improvements to such innovative services as PCS, cellular, land mobile communications, paging, digital television and data transmissions, the Commission has been faced with the unenviable and difficult task of allocating new blocks of spectrum for particular new uses. In the current spectrum-starved environment, it is nearly impossible to accommodate new requests for additional spectrum. In this regard, IBOC DAB systems should be viewed highly favorably because they do not require an allocation of any additional spectrum in order to implement a viable, technically superior digital service. IBOC DAB systems have been demonstrated to increase the efficient use of the spectrum by providing a compelling service upgrade for listeners and broadcasters without harming existing analog broadcasting by offering superior audio quality over today's analog service, and because the IBOC signal is immune to multipath and noise.²⁵

Flexibility. Infinity agrees with the Commission that flexibility is one of the principal benefits of digital technology.²⁶ Subcarriers are currently utilized by broadcasters to provide various audio and data services, including foreign language programming, paging, stock market reports, and traffic control signal switching. IBOC technology can accommodate existing

²⁴NPRM at para. 26.

²⁵NRSC Report at 1-2.

²⁶NPRM at para. 29.

subcarrier services, and in addition, will allow broadcasters to expand the subcarrier services offered and to increase the robustness of existing subcarrier services.²⁷ Infinity strongly urges that broadcasters be provided wide discretion in determining the appropriate mix of main signal programming and ancillary subcarrier services offered by a particular station. For example, a talk format station might determine that it can sacrifice some amount of audio fidelity in order to increase datacasting capability – in which event, the talk station should be allowed to alter the mixture of main audio and ancillary services that it provides. Allowing a broadcaster the level of discretion that is necessary in order to allow for the modification of the mix of main signal and subcarrier services will increase the efficient use of the spectrum, and is therefore in the public interest.

Accommodation. Infinity strongly supports the Commission's position that any DAB system must, to the extent possible, accommodate all existing broadcasters that desire to initiate DAB service.²⁸ USADR's IBOC digital technology offers opportunities to both AM and FM stations to dramatically improve their service. NAB has "stated strongly that IBOC opportunities must be afforded to licensees and listeners of both the AM and FM radio services."²⁹ Historically, AM stations have been even more limited technologically than FM stations in improving performance and signal quality. Because AM stations are not able to provide high quality sound, they are often overly dependent upon news, talk and sports programming, and on average, across all Arbitron markets, capture only approximately 18% of

²⁷Petition at 29-30.

²⁸NPRM at para. 32.

²⁹Comments of NAB at 6.

local commercial share.³⁰ Some AM stations are able to successfully create unique, in-demand niche programming; however, many other AM stations are continually frustrated by their inability to provide programming to meet most effectively their listeners' requirements. Unless AM radio is revived through the ability to offer technological innovations like IBOC DAB, which would provide an immediate and noticeable improvement in the quality of the AM signal, weaker AM stations will continue to languish. Infinity urges that the Commission should prefer a DAB system, like USADR's IBOC system, that offers technological improvements to AM broadcasters as well as FM broadcasters.

With an IBOC system, the transition to an all-digital environment would be relatively smooth, and should result in minimal disruption to station listeners. USADR's IBOC proposal includes a transition period during which broadcasters could continue to provide analog programming.³¹ The gradual transition to all-digital would allow consumers to continue to use analog receivers for several years, and gradually upgrade to digital as part of the normal cycle of equipment replacement. Such a phased-in transition to IBOC will allow broadcasters to upgrade to digital as local listener demand warrants, rather than by requiring a forced, immediate conversion to all-digital technology.

Perhaps most importantly, under an IBOC format, neither the public nor broadcasters will suffer exorbitant costs to upgrade to digital, because most of the equipment currently used by broadcasters (studios, towers, and antennas) will be useable with the digital system, and new digital receivers using the IBOC format, once in full production, should not be

³⁰Petition at 5.

³¹Petition at iii and 20.

significantly more expensive than current analog equipment. Therefore, USADR's IBOC proposal both minimizes disruptions and dislocations, and provides the best opportunity for all existing broadcasters, both AM and FM, to upgrade their stations and to participate in the provision of the greatly-enhanced digital services.

Coverage. The Commission has recognized that preserving existing coverage areas is an important aspect of ensuring a non-disruptive transition to DAB, yet the Commission proposes to develop a digital radio assignment policy that protects only the current analog protected service contours for DAB.³² In order to encourage the public to accept DAB, the Commission should follow the reasoning that it espoused in the digital television ("DTV") proceedings when it determined that digital television coverage must be allowed to match existing television viewing patterns, to the extent possible. In the DTV proceedings, the Commission explained quite clearly that DTV broadcasters should be permitted to replicate the service areas of their existing analog television service areas,³³ declaring that "[o]ur principal goal in this [DTV] proceeding has been to provide all eligible television broadcasters with a second channel that, to the extent possible, replicates the service area of their existing stations..."³⁴ In the DTV proceeding, the Commission stated that it "attempted, to the extent possible, to provide broadcasters with DTV channels that will allow them to 'replicate' the

³²NPRM at para. 33.

³³*Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, MM Docket No. 87-268, FCC 98-24 at para. 26 (1998).

³⁴*Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, MM Docket No. 87-268, FCC 98-315 at para. 1 (1998).

service areas of their existing NTSC [analog] operations, i.e., to provide DTV service to areas that are generally comparable to their existing NTSC [analog] service areas,”³⁵ and that “[c]onsistent with our [the FCC’s] general plan to provide for replication of existing service areas in developing the DTV Table, we attempted to provide allotments that match the authorized service areas of all stations as of the date of the adoption of the DTV Table...”³⁶ Infinity strongly believes that, in reality, radio listeners will expect to receive a station’s digital signal throughout the same area that the existing analog signal is received, which, in many instances, extends beyond a station’s protected contour. Infinity therefore respectfully urges that the Commission establish, as it did in the context of DTV, that DAB coverage will be allowed to match existing analog listening patterns.

IV. IBOC SYSTEMS ARE PREFERABLE TO DAB SYSTEMS THAT REQUIRE NEW SPECTRUM

Infinity agrees with the Commission that a viable IBOC system is superior to a new-spectrum DAB system³⁷, because there simply is no bandwidth available to devote to DAB, and because IBOC technology is the only proposed DAB technology that integrates digital broadcasting into the existing analog AM and FM radio transmission system without the need for additional spectrum. By implementing an IBOC DAB system, as proposed by USADR, rather than a “new spectrum” DAB approach, broadcasters can continue to use the existing spectrum, the Commission will not need to re-license existing broadcasters and draft new regulations for a “new spectrum” service, and radio listeners will continue to find their favorite radio

³⁵*Id.* at para. 4.

³⁶*Id.* at para. 32.

³⁷NPRM at para. 37.

programming at the same location on the radio dial. Because there is no need to allocate new spectrum for DAB, and because essentially no new licensing will be required, unlike with the conversion to DTV, the regulatory burden on the Commission with respect to the transition to IBOC DAB will be minimal. Overall, therefore, the transition to IBOC digital technology would most likely be relatively smooth and quick to implement, and would cause minimal disruption to station listeners. Clearly, this is a major advantage that the IBOC approach has over a new spectrum DAB approach.

The NPRM explores the possibility of using the spectrum currently allocated to TV Channel 6 for a DAB system when such spectrum becomes available; however, the TV Channel 6 spectrum will not become available until after the DTV transition has been completed, which will be the year 2007, at the earliest, and in some cases, not for many years after that. Such an unwarranted delay in implementing DAB would be harmful to both the public, who would be deprived of the benefits of DAB, and broadcasters, who would be forced to compete using their current analog signals against other media that will be providing superior digital service. This could result in the untimely demise of this country's superior radio broadcast service. Instead, allowing this service to upgrade using IBOC technology would build on an invaluable public resource. Infinity is therefore firmly opposed to delaying the implementation of DAB for such a significant period of time.

V. CONCLUSION

For the reasons stated above, in the original Petition for Rulemaking of USADR, and in the numerous comments of broadcasters and the public in the proceeding, it is clear that it is in the public interest for the Commission to adopt a single DAB standard in the most

expeditious manner possible.³⁸ According to CEMA, “[t]echnical standardization is critical...A required standard will protect consumers against losses by assuring them that their investments in DAB equipment will not be made obsolete by a different technology. In addition, requiring the use of a single standard guarantees compatibility. This assures consumers that DAB equipment used to listen to one station can be used to listen to every other station.”³⁹ Further, there is widespread recognition that the Commission should act quickly to recognize that IBOC is the best means for effectively and expeditiously introducing DAB by establishing a definitive process for collecting any additional technical information that it requires to select the IBOC standard by the end of this year. It is especially crucial, in the wake of the FCC’s recent determination to introduce LPFM service, that the DAB standard be selected expediently, so that DAB can be introduced and so that the actual impact of LPFM upon DAB can be determined.

USADR has shown significant progress in its development of a viable IBOC system, and since it filed its Petition for Rulemaking in 1998, USADR has continued to develop and test its IBOC system. Infinity commends USADR for its continuing impressive progress towards the development of a viable, and imminently implementable DAB system. Infinity and many other broadcasters firmly believe that USADR’s IBOC DAB system is the most viable DAB system available, and that, although additional optimization of the system is required, such work is on-going. USADR recently released its Report on Laboratory and Field Testing Presented to the National Radio Systems Committee. This report offers compelling evidence

³⁸ See Comments of ABC, Inc. at 4; Comments of CBS at 9-10; Comments of Clear Channel Communications, Inc. at 5; Comments of Greater Media, Inc. at 9; Comments of Heftel at 3; Comments of NAB at 3; Comments of Radio One at 4.

³⁹ Comments of CEMA at 11-12.

that the USADR IBOC system offers superior audio quality over today's analog service, without harming existing analog broadcasting⁴⁰, while at the same time, offering a level of flexibility equivalent to analog broadcasting in allowing broadcasters to address listener expectations and demands for ancillary subcarrier services.⁴¹ The tests demonstrate that the USADR system offers high quality digital coverage, with increased robustness, throughout a station's current service area, and that the analog audio signal is degraded at signal levels where digital audio degradation is not yet perceptible.⁴² Essentially, USADR's IBOC signal is nearly unimpaired until it completely fails, at which point, the USADR system has the ability to blend from digital to analog at the edge of coverage to allow the listener to acquire any remaining degraded analog signal that might be received.⁴³ Clearly, IBOC, and in particular, USADR's IBOC system, is the premier DAB technology available today.

⁴⁰NRSC Report at 1-2.

⁴¹*Id.* at 6.

⁴²*Id.* at 7.

⁴³*Id.* at 9-10.

For the reasons set forth above, Infinity respectfully urges that the Commission adopt by the end of this year the USADR IBOC system as the standard for DAB.

Respectfully submitted,

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